REMARKS

These remarks are in response to the Office Action dated October 28, 2008. This reply is submitted with a *Request for a Three Month Extension of Time*. At the time of the Office Action, claims 1-29 were pending in the application.

I. Status of the Claims

Claims 5, 7, 9-11, 14, 16, 17, 18, 19, 20, 23, 24, 26 and 27-29 have been amended. No new subject matter has been added. Claims 1-4, 8, 12, 13, 15, 21, 22 and 25 have been canceled without prejudice or disclaimer to the subject matter therein. New claims 30-48 have been added.

Claims 1-10, 12, 13 and 17-19 have been rejected under 35 U.S.C. §103. The rejections are set forth in more detail below.

II. Brief Review of Applicant's Invention

Prior to addressing the Examiner's rejections on the art, a brief review of the Applicant's invention is disclosed. The Applicants invention concerns an optical data carrier in disc format having at least one CD layer and at least one DVD layer. The CD layer has optically readable CD data structures whose lengths, to suit EFM modulation, are between three (3) times and eleven (11) times a basic length T. Three (3) times the basic length T (the 3T value) is at least 0.9 micrometres. Eleven (11) times the basic length (the 11T value) is at least 3.3 micrometres. The CD layer is situated at a depth of less than 1.1 mm from the surface of the data carrier through which the CD layer is read. The CD layer and the DVD layer are read from opposite sides of the data carrier. If the optical data carrier includes a single DVD layer, then the DVD substrate has a thickness of less than 0.570 mm, and at least 0.525 mm. If the optical data carrier includes two or more DVD layers, then the DVD substrate has a thickness of less than 0.550 mm, and at least 0.525 mm.[1]

Notably, the DVD substrate thickness in the single and multiple DVD layer scenarios is reduced to a value below the minimum thickness values allowed by the applicable DVD standards (i.e., EMCA-267 and ECMA-268). These minimum thickness values allowed by the DVD standards are 0.570 mm for the single DVD layer scenario (which is also called DVD-5) and 0.550

[1] *See* paragraph [0017] of the present application.

mm for the two (2) DVD layer scenario (which is also called DVD-9). These are the absolute minimum thickness values, without any further permitted tolerance. Consequently, the present invention overcomes certain drawbacks of conventional optical data carriers. For example, the present invention can be played on a large variety of optical disk players, including optical disc players that place tight limitations on overall thickness of the disc.

Applicant further notes that the related European Patent EP 1 683 139 B1 was granted on December 3, 2008 by the European Patent Office.

III. Claim Rejections Under 35 U.S.C. §103(a)

A. Rejection of Claim 1-4

Claims 1 – 4 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0155871 to Maekawa (hereinafter referred to as "Maewaka"), in view of U.S. Publication No. 2003/0174595 to Wilkinson et al. (hereinafter referred to as "Wilkinson"), and further in view of U.S. Publication No. 2002/0155247 to Arakawa (hereinafter referred to as "Arakawa"). Claims 1 – 4 have been cancelled. As such, the Examiner's rejection to claims 1 – 4 is moot.

B. Rejection of Independent Claim 5

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson. Applicant respectfully traverses the rejection. Claim 5 has been amended so as recite the claimed optical data carrier with greater clarity.

Maekawa generally discloses an optical disc drive equipped with a TLN signal generating apparatus. The TLN signal generating apparatus includes a TLN signal generating circuit, a digitizing circuit and a correction circuit. The TLN signal generating circuit is configured for generating a TLN signal (track loss signal) based on signals obtained from an optical pick-up. The digitizing circuit is configured for digitizing the TLN signal by comparing it with a reference level. The correction circuit is configured for correcting the TLN signal so that it is accurately digitized by the digitizing circuit irrespective of an offset component which is a direct current component contained in the TLN signal.

However, Maekawa fails to disclose the optical data carrier of amended independent claim 5. More particularly, Maekawa fails to disclose and/or suggest an optical data carrier comprising a CD layer and a DVD layer. Rather, Maekawa discloses an optical disk having only a CD layer.[2] Maekawa also fails to disclose and/or suggest an optical data carrier comprising a DVD substrate of a thickness less than 0.570 mm and at least 0.525 mm. Instead, Maekawa discloses and/or suggests an optical disk having a CD substrate with a particular thickness. Notably, the Examiner concedes (in the Office Action dated October 28, 2008) that Maekawa fails to disclose and/or suggest an optical data carrier comprising a DVD layer and DVD substrate of a thickness less than 0.570 mm.[3]

Wilkinson generally discloses an apparatus to produce optical recording structures displaying improvements in the shape of three-dimensional features displayed therein. The shape improvements include reductions in berm height and width, dual level data marks and tracking guides, and land areas projecting above or into the surface of the recording structure. The apparatus may include dual and/or dithered beam writing elements.

However, Wilkinson fails to disclose the optical data carrier of amended independent claim 5. More particularly, Wilkinson fails to disclose and/or suggest an optical data carrier comprising a CD layer **and** a DVD layer. Rather, Wilkinson discloses a double-sided disk with two (2) CD layers **or** two (2) DVD layers.[4] Wilkinson also fails to disclose and/or suggest an optical data carrier comprising a DVD substrate of a thickness less than 0.570 mm and at least 0.525 mm. Instead, Wilkinson discloses and/or suggests an optical disk having a DVD substrate with a particular thickness. Although Wilkinson is silent as to the actual value of the DVD substrate thickness, a person skilled in the art will interpret Wilkinson as suggesting a thickness for the DVD substrate that falls within the range specified by relevant DVD standards. In fact, Wilkinson fails to disclose the advantages of providing a hybrid DVD-CD optical data carrier including a DVD substrate with a thickness less than the minimum value of 0.570 mm specified by the applicable DVD standards (i.e., EMCA-267 and EMCA-268). More specifically, Wilkinson fails to disclose

[2] *See* paragraph [0005] of Maekawa.
[3] *See* pages 4-5, section 3 of the Office Action dated October 28, 2008.
[4] *See* paragraph [0053] of Wilkinson.

an improved hybrid DVD-CD optical data carrier that can be manufactured in mass production and played on a variety of optical disc players that place tight limitation on overall disc thickness.

In the Office Action, the Examiner states that the phrase "a DVD substrate of a thickness less than 0.570 mm" is rejected because "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation". Applicant traverses this rejection. In this regard, Applicant asserts that the claimed DVD substrate thickness of less than 0.570 mm departs from the applicable DVD standards (i.e., EMCA-267 and EMCA-268). The DVD standards require that the thickness of the DVD substrate in the case of a single layer DVD is at least 0.570 mm. This departure from the DVD standards is significant, considering the tight limits imposed by the applicable standards ECMA-267 and EMCA-268. In particular, the applicable standards EMCA-267 and EMCA-268 give a strict lower limit of the thickness of the DVD substrate in the case of a single layer DVD of exactly 0.570 mm, without any further admissible tolerance. Accordingly, the present invention is not a case of finding an optimum or workable range within a broader known range. Rather, the present invention teaches to (a) depart from the applicable standards and (b) find a workable range outside of the known ranges. The departure from the DVD standards is done in such a way that the optical data carrier of the present invention overcomes certain drawbacks of conventional hybrid DVD-CD optical data carriers. For example, the optical data carrier of the present invention can be played on a large number of optical disc players as compared to conventional hybrid DVD-CD optical data carriers. Such optical disc players include, but are not limited to, optical disc players that place tight limitations on overall disc thickness.

In view of the forgoing, Maekawa, Wilkinson and the suggested combination thereof fail to disclose and/or suggest the optical data carrier recited in amended independent claim 5. Maekawa, Wilkinson and the suggested combination thereof also fail to disclose and/or suggest the departure from the DVD standard(s) so as to provide an improved DVD-CD optical data carrier, such as that recited in amended independent claim 5. Therefore, amended independent claim 5 is non-obvious in view of Maekawa, Wilkinson and the suggested combination thereof. Accordingly, amended independent claim 5 is now in condition for allowance.

C. Rejections of Dependant Claims 6 and 7

Claims 6 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, and further in view of U.S. Publication No. 2003/0129408 to Thompson, et al. (hereinafter referred to as "Thompson"). However, claims 6 and 7 are allowable at least by virtue of their dependence on an allowable amended independent base claim 5.

D. Rejection of Dependant Claims 8 9 28

Claims 8, 9 and 28 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson. Claim 8 has been canceled. As such, the Examiner's rejection to claim 8 is moot. Claims 9 and 28 are allowable at least by virtue of their dependence on an allowable amended independent base claim 5.

E. Rejection of Dependant Claims 10 – 12

Claims 10 – 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, further in view of Arakawa. Claim 12 has been canceled. As such, the Examiner's rejection of claim 12 is moot. Claims 10 and 11 are allowable at least by virtue of their dependence on an allowable amended independent base claim 5.

F. Rejection of Dependant Claim 13

Claim 13 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, and further in view of U.S. Patent No. 5,233,582 to Tanno et al. ("hereinafter referred to as "Tanno"). Claim 13 has been canceled. As such, the Examiner's rejection of claim 13 is moot.

G. Rejection of Dependant Claim 17

Claim 17 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, and further in view of U.S. Publication No. 2003/0172286 to Gotoh et al. (hereinafter referred to as "Gotoh"). Claim 17 is allowable at least by virtue of its dependence on an allowable amended independent base claim 5.

H. Rejection of Dependant Claims 18 – 20, 23-26 and 29

Claims 18 – 20, 23 – 26 and 29 have been rejected under 35 U.S.C. §103(a) because "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation". Claim 25 has been canceled. As such, the Examiners rejection to claim 25 is moot. Claims 18, 19, 20, 23, 24, 26 and 29 are allowable at least by virtue of their dependence on an allowable amended independent base claim 5.

I. Rejection of Dependant Claims 21 and 22

Claims 21 and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, and further in view of U.S. Publication No. 2003/0138591 to Nee (hereinafter referred to as "Nee"). Claims 21 and 22 have been cancelled. As such, the Examiner's rejection to claims 21 and 22 is moot.

J. Rejection of Claim 27

Claim 27 had been rejected under 35 U.S.C. §103(a) as being unpatentable over Maekawa in view of Wilkinson, and further in view of U.S. Publication No. 2003/0137913 to Oshima et al. (hereinafter referred to as "Oshima"). Claim 27 is allowable at least by virtue of its dependence on an allowable amended independent base claim 5.

IV. New Claims

Dependant Claims 30-35

New claims 30-35 are allowable at least by virtue of their dependence on an allowable amended independent base claim 5.

Independent Claim 36 and Dependant Claims 37-48

New independent claim 36 distinguishes over the cited references at least on arguments similar to those provided above in relation to amended independent claim 5. For example, Maekawa, Wilkinson and the suggested combination thereof fail to disclose and/or suggest the optical data carrier recited in new independent claim 36. More particularly, Maekawa, Wilkinson

and the suggested combination thereof fail to disclose and/or suggest a hybrid DVD-CD optical data carrier comprising at least two DVD layers and a DVD substrate with a thickness less than 0.550 mm. The claimed DVD substrate thickness of less than 0.550 mm departs from the applicable DVD standards (i.e., EMCA-267 and EMCA-268). These DVD standards require that the thickness of the DVD substrate in the case of a two (2) layer DVD is at least 0.550 mm, without any further admissible tolerance. This departure from the DVD standards is done in such a way that the optical data carrier of new independent claim 36 overcomes certain drawbacks of conventional hybrid DVD-CD optical data carriers comprising two or more DVD layers. For example, the optical data carrier of new independent claim 36 can be played on a large number of optical disc players as compared to conventional hybrid DVD-CD optical data carriers comprising two or more DVD layers.

V. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the forgoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims. Please charge any deficiencies, or credit any overpayment to Deposit Account No. 04-0100.

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